

WHAT IS CLAIMED IS:

5 1. Procedure for suppressing the crosstalk between multiplex channels of a multiplexer (3) which is linked in a circuit arrangement (1) on the input side with signal connections (P1, P2, ... Pn) which can be configured as inputs and outputs, in which the following procedural steps are performed:

- a test is made as to whether at least one of the signal connections (P1, P2, ... Pn) is overmodulated by an impermissible input voltage value,
- each signal connection identified as an overmodulated signal connection (P1, P2, ... Pn) is configured as an output and set to a defined logical signal level.

10 2. Procedure according to claim 1, wherein the following procedural steps are performed to test whether a signal connection (P1, P2, ... Pn) is overmodulated:

- the signal connection (P1, P2, ... Pn) is configured as an input,
- the input voltage value at the signal connection (P1, P2, ... Pn) is converted by an analog-digital converter (2) connected on the load side of the multiplexer (3) into a digital data value (s) which lies within a data range limited by a lower data limit value and an upper data limit value,
- if the digital data value equals the upper or lower data limit value, the signal connection (P1, P2, ... Pn) is identified as overmodulated.

20 3. Procedure according to claim 2, wherein the procedural steps are repeated cyclically and wherein a signal connection (P1, P2, ... Pn) which has been identified as an overmodulated signal connection in a previous cycle and has been configured as an output is released for configuration as an input if it is no longer overmodulated.

25 4. Procedure according to claim 3, wherein each overmodulated signal connection (P1, P2, ... Pn) configured as an output is set to a high level as a defined logical signal level if the input voltage value at this signal connection (P1, P2, ... Pn) is converted by the analog-digital converter (2) into a data value equal to the upper data limit value.

5. Procedure according to claim 3, wherein each overmodulated signal connection (P1, P2, ... Pn) configured as an output is set to a low level as a defined logical signal level if the input voltage value at this signal connection (P1, P2, ... Pn) is converted by the analog-digital converter (2) into a data value equal to the lower data limit value.

6. Procedure according to claim 3, wherein each overmodulated signal connection (P1, P2, ... Pn) configured as an output is set to a high level as a defined logical signal level if the input voltage value at this signal connection (P1, P2, ... Pn) is converted by the analog-digital converter (2) into a data value equal to the upper data limit value, and is set to a low level as a defined logical signal level if the input voltage value at this signal connection (P1, P2, ... Pn) is converted by the analog-digital converter (2) into a data value equal to the lower data limit value.